		Aeronautics Educat	
2006 21st Century Science Standards and Objectives West Virginia 21st Century Science			
Activity/Lesson	State	Standards	
7.0t.71ty/2000011	Otato	Otanida do	interpret science as the human's search for an
		SCI.2.SC.O.2.1.	understanding of the world by asking questions
Air Engines (12-16)	WV	01	about themselves and their world.
			measure the length and width of various objects
			using standard and non-standard units (e.g.,
Air Engines (12-16)	WV	06	metric ruler, paper clips, or counting bears).
A:	140 /		compare the effects of force on the motion of an
Air Engines (12-16)	WV	10	object.
Air Engines (10.16)	1407	SCI.2.SC.O.2.2.	,
Air Engines (12-16)	WV	14	precipitation. interpret science as the human's search for an
		SCI 2 SC O 2 1	understanding of the world by asking questions
Rotor Motor (69-75)	WV	01	about themselves and their world.
TOTOL INICION (09-13)	V V	01	about themselves and their world.
Flight: Interdisciplinary			
Learning Activities (76-		SCI.2.SC.O.2.2.	
79)	WV	13	identify the effects of wind movement.
Making Time Fly (80-			compare the lives and discoveries of scientists
86)	WV	02	of different cultures and backgrounds.
			design and conduct simple investigations;
			observe, collect and record information using a
			variety of classification systems; describe trends
			of data; and make predictions based on that
Making Time Fly (80-			data (e.g., seasonal changes and plants or
86)	WV	08	temperature and weather).
Where is North? The		001000001	interpret science as the human's search for an
Compass Can Tell Us	1407		understanding of the world by asking questions
(87-90) Where is North? The	WV	01	about themselves and their world.
Compass Can Tell Us		SCI 2 SC O 2 1	demonstrate curiosity, initiative and creativity by observing, classifying, comparing and analyzing
(87-90)	WV	04	natural objects in the environment.
(01-90)	V V	04	manipulate scientific instruments and everyday
Where is North? The			materials to investigate the natural world (e.g.,
Compass Can Tell Us		SCI.2.SC.O.2.1.	hand lens, balance, thermometer, metric ruler,
(87-90)	WV	05	magnets, weather instruments, or calculators).
. ,			design and conduct simple investigations;
			observe, collect and record information using a
			variety of classification systems; describe trends
Where is North? The			of data; and make predictions based on that
Compass Can Tell Us		SCI.2.SC.O.2.1.	data (e.g., seasonal changes and plants or
(87-90)	WV	08	temperature and weather).
Where is North? The			
Compass Can Tell Us			demonstrate that a magnet can attract or repel
(87-90)	WV	07	objects.

			interpret science as the human's search for an
Dunked Napkin (17-		SCI.2.SC.O.2.1.	understanding of the world by asking questions
22)	WV	01	about themselves and their world.
			manipulate scientific instruments and everyday
			materials to investigate the natural world (e.g.,
Dunked Napkin (17-		SCI.2.SC.O.2.1.	hand lens, balance, thermometer, metric ruler,
22)	WV	05	magnets, weather instruments, or calculators).
			identify materials as a solid, a liquid or a gas
Dunked Napkin (17-		SCI.2.SC.O.2.2.	and recognize that matter takes up space, and
22)	WV	06	can change from one state to another.
			interpret science as the human's search for an
Paper Bag Mask (23-		SCI.2.SC.O.2.1.	
28)	WV	01	about themselves and their world.
/			demonstrate curiosity, initiative and creativity by
Paper Bag Mask (23-		SCI.2.SC.O.2.1.	
28)	WV	04	natural objects in the environment.
/			
			measure the length and width of various objects
Paper Bag Mask (23-		SCI 2 SC O 2 1	using standard and non-standard units (e.g.,
28)	WV	06	metric ruler, paper clips, or counting bears).
			identify materials as a solid, a liquid or a gas
Paper Bag Mask (23-		SCI.2.SC.O.2.2.	and recognize that matter takes up space, and
28)	WV	06	can change from one state to another.
,			interpret science as the human's search for an
Wind in Your Socks)		SCI.2.SC.O.2.1.	
(29-35)	WV	01	about themselves and their world.
(manipulate scientific instruments and everyday
			materials to investigate the natural world (e.g.,
Wind in Your Socks)		SCI.2.SC.O.2.1.	
(29-35)	WV	05	magnets, weather instruments, or calculators).
()			J star, star star star star star star star star
			measure the length and width of various objects
Wind in Your Socks)		SCI.2.SC.O.2.1.	using standard and non-standard units (e.g.,
(29-35)	WV	06	metric ruler, paper clips, or counting bears).
Wind in Your Socks)		SCI.2.SC.O.2.2.	71 1 1 7
(29-35)	WV	13	identify the effects of wind movement.
Wind in Your Socks)		SCI.2.SC.O.2.2.	observe and describe different types of
(29-35)	WV	14	precipitation.
Wind in Your Socks)		SCI.2.SC.O.2.3.	observe that changes occur gradually,
(29-35)	WV	03	repetitively, or randomly within the environment.
,			recognize that common objects and events
			incorporate science (e.g., CD players, Velcro, or
Wind in Your Socks)		SCI.2.SC.O.2.3.	weather) to solve human problems and enhance
(29-35)	WV	04	the quality of life.
Air: Interdisciplinary			-
Learning Activities (36-		SCI.2.SC.O.2.2.	
39)	WV	13	identify the effects of wind movement.
			interpret science as the human's search for an
		SCI.2.SC.O.2.1.	understanding of the world by asking questions
Bag Balloons (40-43)	WV	01	about themselves and their world.
			interpret science as the human's search for an
		SCI.2.SC.O.2.1.	understanding of the world by asking questions
Sled Kite (44-51)	WV	01	about themselves and their world.

		eronautics Educat	
		2006 21st Century	
		Standards and Obj	ectives
West Virginia 21st Ce	ntury Science		
Grade 3			
Activity/Lesson	State	Standards	
			recognize that scientific explanations may lead
			to new discoveries (e.g., new knowledge leads
Air Engines (12-16)	WV	01	to new questions).
			demonstrate curiosity, initiative and creativity by
Air Engines (12-16)	WV	04	planning and conducting simple investigations.
		SCI.3.SC.O.3.1.	1
Air Engines (12-16)	WV	09	measurements.
			observe and describe relationships among
		SCI.3.SC.O.3.2.	,
Air Engines (12-16)	WV	04	factors.
			recognize that it takes work to move objects
Air Engines (12-16)	WV	11	over a distance.
	140 /	SCI.3.SC.O.3.2.	•
Air Engines (12-16)	WV	12	distance, and time.
			observe that changes occur gradually,
	140 /	l .	repetitively, or randomly within the environment
Air Engines (12-16)	WV	03	and question causes of changes.
_ , ,, ,, ,,,		l .	demonstrate curiosity, initiative and creativity by
Rotor Motor (69-75)	WV	04	planning and conducting simple investigations.
D (14 ((00 ==)	140 /	SCI.3.SC.O.3.1.	
Rotor Motor (69-75)	WV	11	identify and control variables.
Flight: Interdisciplinary		001000000	
Learning Activities (76-			examine the relationships between speed,
79)	WV	12	distance, and time.
Cliabte Intendicainlines			
Flight: Interdisciplinary Learning Activities (76-		SCI 2 SC O 2 2	identify goographical features using a model or
,	WV	22	identify geographical features using a model or
79) Where is North? The	VVV		map.
Compass Can Tell Us		SCI 3 SC O 3 1	demonstrate curiosity, initiative and creativity by
(87-90)	WV	04	planning and conducting simple investigations.
Let's Build a Table Top	VVV	SCI.3.SC.O.3.3.	planning and conducting simple investigations.
Airport (91-96)	WV	02	use models as representations of real things.
Plan to Fly There (97-	V V	SCI.3.SC.O.3.2.	examine the relationships between speed,
106)	WV	12	distance, and time.
We Can Fly, You and			
I: Interdisciplinary		SCI.3.SC.O.3.3.	
Learning (107-108)	WV	02	use models as representations of real things.
			recognize that scientific explanations may lead
Dunked Napkin (17-		SCI.3.SC.O.3.1.	to new discoveries (e.g., new knowledge leads
22)	WV	01	to new questions).
Dunked Napkin (17-		SCI.3.SC.O.3.1.	demonstrate curiosity, initiative and creativity by
	WV	04	planning and conducting simple investigations.
22)	VVV	04	pianning and conducting simple investigations.

Sled Kite (44-51)	WV	11 SCI.3.SC.O.3.3.	identify and control variables.
		SCI.3.SC.O.3.1.	
Sled Kite (44-51)	WV	SCI.3.SC.O.3.1.	demonstrate curiosity, initiative and creativity by planning and conducting simple investigations.
Sled Kite (44-51)	WV	SCI.3.SC.O.3.1.	recognize that scientific explanations may lead to new discoveries (e.g., new knowledge leads to new questions).
Bag Balloons (40-43)	WV		demonstrate curiosity, initiative and creativity by planning and conducting simple investigations.
Wind in Your Socks) (29-35)	WV		observe that changes occur gradually, repetitively, or randomly within the environment and question causes of changes.
Wind in Your Socks) (29-35)	WV	SCI.3.SC.O.3.1.	interpret data presented in a table, graph, map or diagram and use it to answer questions and make predictions and inferences based on patterns of evidence.
Wind in Your Socks) (29-35)	WV	09	apply mathematical skills and use metric units in measurements.
(29-35)	WV	04	planning and conducting simple investigations.
Wind in Your Socks) (29-35) Wind in Your Socks)	WV	01	
Paper Bag Mask (23-28)	WV	SCI.3.SC.O.3.3.	observe that changes occur gradually, repetitively, or randomly within the environment and question causes of changes. recognize that scientific explanations may lead
Paper Bag Mask (23- 28)	WV	SCI.3.SC.O.3.1. 09	apply mathematical skills and use metric units in measurements.
Paper Bag Mask (23- 28)	WV	SCI.3.SC.O.3.1. 04	demonstrate curiosity, initiative and creativity by planning and conducting simple investigations.
22) Paper Bag Mask (23-28)	WV		and question causes of changes. recognize that scientific explanations may lead to new discoveries (e.g., new knowledge leads to new questions).
Dunked Napkin (17-	WV	SCI.3.SC.O.3.3.	observe that changes occur gradually, repetitively, or randomly within the environment
Dunked Napkin (17- 22)	WV	-	
Dunked Napkin (17-22)	WV	SCI.3.SC.O.3.1.	interpret data presented in a table, graph, map or diagram and use it to answer questions and make predictions and inferences based on patterns of evidence.
Dunked Napkin (17- 22)	WV	SCI.3.SC.O.3.1.	use scientific instruments, technology, and everyday materials to investigate the natural world.

West Virginia 21st Ce	entury Science		
Grade 4			
Activity/Lesson	State	Standards	
		SCI.4.SC.O.4.1.	explain how new discoveries lead to changes in
Air Engines (12-16)	WV	01	scientific knowledge.
			demonstrate curiosity, initiative and creativity by
			developing questions that lead to investigations;
			designing simple experiments; and trusting
		SCI.4.SC.O.4.1.	observations of discoveries when trying new
Air Engines (12-16)	WV	04	tasks and skills.
		SCI.4.SC.O.4.1.	apply mathematical skills and use metric units in
Air Engines (12-16)	WV	13	measurements and calculations.
		SCI.4.SC.O.4.2.	predict and investigate the motion of an object if
Air Engines (12-16)	WV	22	the applied force is changed.
			observe that changes occur gradually,
		SCI.4.SC.O.4.3.	repetitively, or randomly within the environment
Air Engines (12-16)	WV	03	and question causes of change.
			demonstrate curiosity, initiative and creativity by
			developing questions that lead to investigations;
			designing simple experiments; and trusting
		SCI.4.SC.O.4.1.	observations of discoveries when trying new
Rotor Motor (69-75)	WV	04	tasks and skills.
		SCI.4.SC.O.4.2.	predict and investigate the motion of an object if
Rotor Motor (69-75)	WV	22	the applied force is changed.
			demonstrate curiosity, initiative and creativity by
			developing questions that lead to investigations;
Where is North? The			designing simple experiments; and trusting
Compass Can Tell Us		SCI.4.SC.O.4.1.	observations of discoveries when trying new
(87-90)	WV	04	tasks and skills.
Where is North? The			observe that changes occur gradually,
Compass Can Tell Us		SCI.4.SC.O.4.3.	repetitively, or randomly within the environment
(87-90)	WV	03	and question causes of change.
We Can Fly, You and			describe the positive and negative
I: Interdisciplinary			consequences of the application of technology
Learning (107-108)	WV	10	on personal health and the environment.
Dunked Napkin (17-			explain how new discoveries lead to changes in
22)	WV	01	scientific knowledge.
			demonstrate curiosity, initiative and creativity by
			developing questions that lead to investigations;
			designing simple experiments; and trusting
Dunked Napkin (17-		SCI.4.SC.O.4.1.	, ,
22)	WV	04	tasks and skills.
			use scientific instruments, technology and
Dunked Napkin (17-		SCI.4.SC.O.4.1.	1 , ,
22)	WV	07	world.
			establish variables and controls in an
Dunked Napkin (17-		SCI.4.SC.O.4.1.	
22)	WV	10	experimentation.
Dunked Napkin (17-		SCI.4.SC.O.4.2.	, ,
22)	WV	22	the applied force is changed.
Paper Bag Mask (23-		SCI.4.SC.O.4.1.	, ,
28)	WV	01	scientific knowledge.

			demonstrate curiosity, initiative and creativity by
			developing questions that lead to investigations;
			designing simple experiments; and trusting
Paper Bag Mask (23-		SCI.4.SC.O.4.1.	
28)	WV	04	tasks and skills.
			establish variables and controls in an
Paper Bag Mask (23-		SCI.4.SC.O.4.1.	experiment; test variables through
28)	WV	10	experimentation.
Paper Bag Mask (23-			1 1 1 2
28)	WV	13	measurements and calculations.
Paper Bag Mask (23-		SCI.4.SC.O.4.2.	predict and investigate the motion of an object if
28)	WV	22	the applied force is changed.
			observe that changes occur gradually,
Paper Bag Mask (23-		SCI.4.SC.O.4.3.	repetitively, or randomly within the environment
28)	WV	03	and question causes of change.
			demonstrate curiosity, initiative and creativity by
			developing questions that lead to investigations;
			designing simple experiments; and trusting
Wind in Your Socks)		SCI.4.SC.O.4.1.	observations of discoveries when trying new
(29-35)	WV	04	tasks and skills.
			interpret data presented in a table, graph, or
Wind in Your Socks)		SCI.4.SC.O.4.1.	
(29-35)	WV	11	make decisions.
Wind in Your Socks)			
(29-35)	WV	13	measurements and calculations.
		1.5	observe that changes occur gradually,
Wind in Your Socks)		SCI.4.SC.O.4.3.	repetitively, or randomly within the environment
(29-35)	WV	03	and question causes of change.
(20 00)	1		demonstrate curiosity, initiative and creativity by
			developing questions that lead to investigations;
			designing simple experiments; and trusting
		SCI.4.SC.O.4.1.	
Bag Balloons (40-43)	WV	04	tasks and skills.
Day Dalloons (40-43)	VVV	SCI.4.SC.O.4.1.	explain how new discoveries lead to changes in
Slad Kita (44 51)	WV	01	scientific knowledge.
Sled Kite (44-51)	VVV	01	
		SCI 4 SC O 4 3	observe that changes occur gradually,
Clad Vita (44 E4)	140.7	SCI.4.SC.O.4.3.	
Sled Kite (44-51)	WV		and question causes of change.
Diabt Eliabt (50.50)	1407	SCI.4.SC.O.4.3.	
Right Flight (52-59)	WV	02	create models as representations of real things.
Delta Wing Glider (60-	100	SCI.4.SC.O.4.3.	
68)	WV	02	create models as representations of real things.